

## General

### Title

Pediatrics: percentage of well child visits for children 3 years and older with a documented blood pressure.

### Source(s)

Chen AY, Schrager SM, Mangione-Smith R. Quality measures for primary care of complex pediatric patients. *Pediatrics*. 2012 Mar;129(3):433-45. [PubMed](#)

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the percentage of well child visits for children 3 years and older with a documented blood pressure.

### Rationale

Children with multiple conditions and/or special health care needs are often managed by several providers, including generalists, specialists, and other health professionals. The chronic and complex nature of these conditions, coupled with fragmented interaction and communication across multiple providers, can lead to inconsistent and poorly managed care.

The "patient-centered medical home" (PCMH), defined by the American Academy of Pediatrics (AAP) and other primary care professional organizations as accessible, continuous, comprehensive, family-centered, coordinated, compassionate, culturally effective care, has been adopted as a promising care model for all patients; it is a particularly excellent care model for children with complex conditions and special health

care needs. The PCMH is a primary care setting that facilitates partnerships between patients (patients' families) and their physicians. Chen et al (2012) examined evidence for primary care based on the patient- centered medical home model and identified valid and meaningful quality measures for use in complex pediatric patients.

## Evidence for Rationale

Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. JAMA. 2002 Oct 9;288(14):1775-9. [PubMed](#)

Chassin MR, Galvin RW. The urgent need to improve health care quality. Institute of Medicine National Roundtable on Health Care Quality. JAMA. 1998 Sep 16;280(11):1000-5. [41 references] [PubMed](#)

Chen AY, Newacheck PW. Insurance coverage and financial burden for families of children with special health care needs. Ambul Pediatr. 2006 Jul-Aug;6(4):204-9. [PubMed](#)

Chen AY, Schrager SM, Mangione-Smith R. Quality measures for primary care of complex pediatric patients. Pediatrics. 2012 Mar;129(3):433-45. [PubMed](#)

Frieden TR, Mostashari F. Health care as if health mattered. JAMA. 2008 Feb 27;299(8):950-2. [PubMed](#)

Hobbs N, Perrin JM, Ireys HT. Chronically ill children and their families. San Francisco (CA): Jossey-Bass Inc, Publishers; 1985.

Houtrow AJ, Kim SE, Chen AY, Newacheck PW. Preventive health care for children with and without special health care needs. Pediatrics. 2007 Apr;119(4):e821-8. [PubMed](#)

Institute of Medicine, Committee on Quality of Health Care in America. Corrigan JM, et al, editor(s). Crossing the quality chasm: a new health system for the 21st century. Washington (DC): National Academy Press; 2001. 337 p.

Klerman LV, Perloff JD. Recent trends in the health of US children. In: Stein RE, editor(s). Health care for children-what's right, what's wrong, what's next. New York (NY): United Hospital Fund; 1997.

Managed care and children with special health care needs: a subject review. American Academy of Pediatrics Committee on Children with Disabilities. Pediatrics. 1998 Sep;102(3 Pt 1):657-60. [PubMed](#)

Mangione-Smith R, DeCristofaro AH, Setodji CM, Keesey J, Klein DJ, Adams JL, Schuster MA, McGlynn EA. The quality of ambulatory care delivered to children in the United States. N Engl J Med. 2007 Oct 11;357(15):1515-23. [PubMed](#)

McGlynn EA, Asch SM, Adams J, Keesey J, Hicks J, DeCristofaro A, Kerr EA. The quality of health care delivered to adults in the United States. N Engl J Med. 2003 Jun 26;348(26):2635-45. [PubMed](#)

Medical Home Initiatives for Children With Special Needs Project Advisory Committee, American Academy of Pediatrics. The medical home. Pediatrics. 2002 Jul;110(1 Pt 1):184-6. [PubMed](#)

Newacheck PW, Stein RE, Walker DK, Gortmaker SL, Kuhlthau K, Perrin JM. Monitoring and evaluating managed care for children with chronic illnesses and disabilities. Pediatrics. 1996 Nov;98(5):952-8. [PubMed](#)

Reed MC, St. Peter RF. Satisfaction and quality: patient and physician perspectives. Washington (DC): Center for Studying Health System Change; 1997.

Schuster MA, McGlynn EA, Brook RH. How good is the quality of health care in the United States. *Milbank Q.* 1998;76(4):517-63, 509. [75 references] [PubMed](#)

Special emphasis notice: AHRQ announces interest in career development (K) grants focused on prevention and healthcare management of complex patients. Notice number: NOT-HS-08-004. [internet]. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2007 Dec 14 [accessed 2008 Oct 06].

## Primary Health Components

Well child visit; blood pressure; children

## Denominator Description

Number of well child visits (see the related "Denominator Inclusions/Exclusions" field)

## Numerator Description

Number of visits with a documented blood pressure (see the related "Numerator Inclusions/Exclusions" field)

## Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

Focus groups

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

### Additional Information Supporting Need for the Measure

- There is broad consensus on the emerging need to provide patient- and family-centered care; for example, researchers have noted with concern the rarity with which patient and family perspectives are considered valid evidence to inform quality measures or guidelines, and the American Academy of Pediatrics (AAP) has explicitly urged pediatricians to establish partnerships with families of medically complex children in planning and executing care.
- Chronic diseases represent perhaps the largest burden on our health care system today. Unlike care for acute illnesses, which is usually contained in a finite number of visits, medical care for chronic illnesses is a long-term process that requires multifaceted care. Wagner and colleagues commented that the needs of patients with chronic illnesses are unlikely to be met by an acute care system.
- Coordination of care is also an important component of care for clinically complex patients. A recent Commonwealth Fund report suggested a "roadmap" for coordination of care, advocating that it should be proactive, planned, comprehensive, support/rely on team care, and jointly developed (with patient/family) to ensure effective communication and collaboration.

- For chronically ill children, another facet of care involves prevention and health maintenance.

## Evidence for Additional Information Supporting Need for the Measure

Antonelli R, McAllister J, Popp J. Making care coordination a critical component of the pediatric health system: a multidisciplinary framework. New York (NY): The Commonwealth Fund; 2009.

Bodenheimer T, Chen E, Bennett HD. Confronting the growing burden of chronic disease: can the U.S. health care workforce do the job. *Health Aff (Millwood)*. 2009 Jan-Feb;28(1):64-74. [PubMed](#)

Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness: the chronic care model, Part 2. *JAMA*. 2002 Oct 16;288(15):1909-14. [PubMed](#)

Chen AY, Schrager SM, Mangione-Smith R. Quality measures for primary care of complex pediatric patients. *Pediatrics*. 2012 Mar;129(3):433-45. [PubMed](#)

Krahn M, Naglie G. The next step in guideline development: incorporating patient preferences. *JAMA*. 2008 Jul 23;300(4):436-8. [PubMed](#)

Palfrey JS, Sofis LA, Davidson EJ, Liu J, Freeman L, Ganz ML, Pediatric Alliance for Coordinated Care. The Pediatric Alliance for Coordinated Care: evaluation of a medical home model. *Pediatrics*. 2004 May;113(5 Suppl):1507-16. [PubMed](#)

Rothman AA, Wagner EH. Chronic illness management: what is the role of primary care?. *Ann Intern Med*. 2003 Feb 4;138(3):256-61. [56 references] [PubMed](#)

Wagner EH, Austin BT, Von Korff M. Organizing care for patients with chronic illness. *Milbank Q*. 1996;74(4):511-44. [121 references] [PubMed](#)

## Extent of Measure Testing

Unspecified

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Ambulatory/Office-based Care

Patient-centered Medical Homes

## Professionals Involved in Delivery of Health Services

not defined yet

## Least Aggregated Level of Services Delivery Addressed

Clinical Practice or Public Health Sites

## Statement of Acceptable Minimum Sample Size

Unspecified

## Target Population Age

Age greater than or equal to 3 years

## Target Population Gender

Either male or female

# National Strategy for Quality Improvement in Health Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Health and Well-being of Communities

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

## IOM Care Need

Staying Healthy

## IOM Domain

Effectiveness

# Data Collection for the Measure

## Case Finding Period

Unspecified

## Denominator Sampling Frame

Patients associated with provider

## Denominator (Index) Event or Characteristic

Encounter

## Denominator Time Window

not defined yet

## Denominator Inclusions/Exclusions

Inclusions

Number of well child visits

Exclusions

Emergency department (ED) or urgent care visits

Visits for children before 3rd birthday

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

Inclusions

Number of visits with a documented blood pressure

Exclusions

The chart documenting a reason for not having blood pressure

## Numerator Search Strategy

Fixed time period or point in time

## Data Source

Administrative clinical data

Electronic health/medical record

Paper medical record

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

### Measure Specifies Disaggregation

Does not apply to this measure

### Scoring

Rate/Proportion

### Interpretation of Score

Desired value is a higher score

### Allowance for Patient or Population Factors

not defined yet

### Standard of Comparison

not defined yet

## Identifying Information

### Original Title

If a child is 3 years or older, the child's blood pressure should be measured and documented at every well child visit or note a reason for not doing so.

### Measure Collection Name

Quality Measures for Primary Care of Complex Pediatric Patients

### Measure Set Name

Primary Care

## Submitter

Chen, Alex, MD, MS; Schrager, Sheree, MS, PhD; Mangione-Smith, Rita, MD, MPH - Independent Author(s)

## Developer

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## Funding Source(s)

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## Composition of the Group that Developed the Measure

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## Financial Disclosures/Other Potential Conflicts of Interest

The authors have indicated they have no financial relationships relevant to this article to disclose.

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2012 Mar

## Measure Maintenance

Unspecified

## Date of Next Anticipated Revision

Unspecified

## Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in October 2015.



## Measure Availability

Source available from the [American Academy of Pediatrics \(AAP\) Web site](#) .

For more information, contact Alex Chen, MD, MS, at AltaMed Health Services, 2040 Camfield Ave, Los Angeles, CA 90040; Phone: 562-659-2821; E-mail: [alexchen\\_y@yahoo.com](mailto:alexchen_y@yahoo.com) .

## NQMC Status

This NQMC summary was completed by ECRI Institute on July 8, 2013. The information was verified by the measure developer on July 29, 2013.

The information was reaffirmed by the measure developer on October 16, 2015.

## Copyright Statement

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## Production

### Source(s)

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